

Lucas County Storm Water Management

Exploring a Storm Water District
December 3, 2008





Storm Water Challenges

- The environment
- Flooding and drainage
- Water pollution
- New mandated and unfunded EPA regulations
- Lack of dedicated funding source



Flooding & Drainage

- Development and growth increase the amount of storm water runoff and the speed at which water drains
- Runoff from roofs, parking lots and roads can overwhelm the current system of ditches and storm sewers causing flooding

Water Pollution



- Runoff creates river/lake pollution
- Sediments from new construction
- Chemicals from industrial & commercial sites
- Lawn chemicals & septic sewage from residential sites



EPA Regulations

- County, 7 Townships and 2 Villages are joint permittees on Storm Water Management Plan required by U.S. EPA
 - Jerusalem Township
 - Monclova Township
 - Spencer Township
 - Springfield Township
 - Sylvania Township
 - Washington Township
 - Waterville Township
 - Village of Holland
 - Village of Waterville



EPA Regulations

- Current permit expires in 2008
- New, more stringent regulations may go into effect
 - Will require greater level of service to meet requirements
 - Failure to meet regulations could result in large fines and/or criminal charges



Regulations Cover 6 Minimum Control Measures

- Public Education
- Public Involvement
- Illicit Discharges
- Construction Site Runoff
- Post Construction
- Maintenance & Good Housekeeping



Options

- Continue funding storm water management activities through current funding sources
 - Increased funding will be required
- Develop Storm Water District
 - As permitted by Ohio Revised Code 6117



Storm Water District

- Dedicated funding source
- Fee is based on contribution to runoff
- Flat residential/farm rate
- District may mail bills on county property taxes
- No new bureaucracy
- Comprehensive watershed approach



Storm Water District

- Proven approach
- Already used by 900+ municipalities nationwide
- Ohio Counties such as:
 - Butler, Hamilton, Lake, Trumbull and Warren
- More than 60 Cities in Ohio such as
 - Toledo, Columbus, Dayton, Cincinnati, Lancaster, Newark, Milford, Loveland, Greenville, Delaware and many more



Storm Water District

- Only areas that are named as part of the EPA permit would be required to participate
- Other townships, villages and municipalities could opt in



Process of Forming a District

- Develop overall business plan
- Determine existing cost of service
- Determine required minimum cost of service to meet EPA regulations and drainage
- Public input
- Determine rate plan
- Implement billing system



What's Been Accomplished to Date?

- Feasibility study
- Public opinion research
- Study identified level of service and level of money spent on current storm water activities throughout Lucas County



Study Results

- 21 County departments/agencies currently have storm water responsibilities or perform storm water activities
 - 7 Townships
 - 2 Villages
 - Lucas County
 - County Engineer
 - Sanitary Engineer
 - TMACOG
 - Recreation Dept.
 - Solid Waste District
 - Emergency Management
 - Health Department
 - Road Maintenance
 - MetroParks
 - Soil and Water Conservation District



Current Annual Level of Service

• Administration	\$120,000
• Engineering	\$810,000
• Maintenance	\$600,000
• NPDES Permit	\$1,370,000
TOTAL	\$2,900,000



Current Annual Level of Service

- Water Quality/Permit \$1.9 Million (65.51%)
- Drainage/Flooding \$1.0 Million (34.49%)



What happens next?

- Determine “required minimum” level of service to meet the water quality (environmental & permit) activities and flooding needs
- Determine anticipated costs for new permit activities for the next five years
- Develop rate to meet the required minimum level of service



Billing Calculation

- Equivalent Residential Unit (ERU) developed based on average amount of hard surface area on residential property
 - Typically 4,000 sq. ft. to 6,000 sq. ft. range is average in other counties in Ohio and across the country

Billing Calculation

- Non-residential properties measured for hard surface (impervious area) – ERUs calculated
- Example: 12,000 sq. feet of impervious surface area divided by 6,000 = 2 ERUs

Hard Surface Area





Survey of County Residents

- 300 random residents in affected area surveyed in September 2006
- Nearly one-third (27.6%) said they are familiar with storm water problems like flooding

Survey of County Residents

- Respondents say pollution is the most important storm water related problem

• Pollution	33.8%
• Flooding	21.1%
• Property damage	20%
• Crop damage	8.9%
• Erosion	4.2%



Survey of County Residents

- 45% of residents would support a \$4 a month fee to address storm water issues



Project Timeline

- December 2008
 - Complete financial plan
 - Begin public education program
- January 2009
 - Hold first of 3 SWAC working meetings
- July 2009 or January 2010
 - First bills issued



SWAC responsibilities

- Be present at the SWAC meetings
- Learn as much as you can about storm water management (do your homework)
- Talk about storm water issues with your constituents, co-workers, friends and neighbors
- Listen to other SWAC members and respect their opinions
- Express your ideas and opinions
- Support the elected officials and county staff